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UNITED STATES OF AMERICA.



COTTON

IN THE

MIDDLE STATES,

WITH DIRECTIONS

FOR ITS EASY CULTURE.

BY
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COTTON IN THE MIDDLE STATES.

Long before the Southern States took up its regular culture, Cotton was raised on the eastern shore of Maryland, lower counties of Delaware, and other places in the Middle States. As early as 1736, and for some time after, it was chiefly regarded as an ornamental plant, and confined to gardens; but it soon became appreciated for its useful qualities, and was brought under regular cultivation. This culture, though comparatively limited in those places, has never been entirely abandoned up to the present day. I have myself seen many families who came from Sussex county, Delaware, to reside in the adjoining county of Kent, wearing clothes made of cotton of their own raising, spinning and weaving.

The culture of Cotton in this section of our country gradually diminished in consequence of the vast area over which the plant was extended in more southern States. In competition with these, our more northern farmers found they possessed superior advantages for raising other field crops, from which they derived greater profits.

Limited as has been the culture of Cotton on the peninsula between the Delaware and Chesapeake Bays, it has furnished a demonstration of the highest importance to our country. In proof of this, it may be stated that at the close of the Revolution, a Convention was held at Annapolis, in 1786, to consider what means could be best resorted to for the purpose of remedying the embarrassments of the country, then so much exhausted in its finances. The late President Madison, a member of this Convention, from Virginia, there expressed it as his opinion, *that from the results of Cotton raising in Talbot county, Maryland, and numerous other proofs furnished in Virginia, there was no*

reason to doubt "that the United States would one day become a great Cotton producing country!" It would hence appear that the first culture of Cotton in the United States, worthy of notice, was made on the peninsula between the Delaware and Chesapeake Bays, from whence it crossed into Western Maryland and Virginia, and so went Southwards.

It must be borne in mind, that before and some time after the Revolution, Cotton necessarily commanded a high price, as it was chiefly imported from distant countries, and the home product was very limited. Its seeds were then picked from the wool by the tedious labor of the hands, the practice pursued from time immemorial by Egyptians, Hindoos, Chinese and other Cotton producers, in all ages and countries. Some idea of the labor formerly expended in the primitive mode of separating cotton from its seed, may be formed from the fact that a pound a day of clean cotton was considered a fair task for a hand. Under such circumstances, it was easy to raise more than could be picked from the seed by hand-work. At this juncture American ingenuity came into play, and Eli Whitney, about the year 1793, invented his famous Cotton Gin, by means of which a new era in the culture of Cotton was established, *three hands, assisted by water-power, being now able to separate, in the same time, as much cotton from its seed, as would before have required three thousand pair of hands!* The chief impediment in the way of Cotton raising being now removed, a new impetus was given to this branch of American agriculture, with the most astonishing results. The quantity raised became so great, and the price so much reduced, that Cotton wool finally took precedence of all other textile fibres employed for clothing and other useful purposes. Millions of people at home and abroad, found employment, either in the culture, transportation, or manufacture of the rich crops of superior Cotton produced from American soil; and its well known importance has finally led the Southern States to believe that having the chief monopoly of such an indispensable article, they might readily make it the means of establishing their

independence. The direful events which have grown out of this belief, are unhappily too familiar to us all, and urge the necessity of resorting to means calculated to protect us in future against such tyrannical dictation.

In this struggle for mastery, the supply of Southern Cotton being at present mainly cut off so as to enhance the price, three or four fold, it becomes interesting to those who live in localities farther north, favorable to the development of the Cotton plant, to consider whether it may not be to their advantage to direct attention to its culture, the success of which rests upon the answers that may be given to the following questions:—

- 1st. Have we in any part of the Middle States a climate and soil adapted to the culture of Cotton?
- 2d. Have we at hand the necessary skill to cultivate and prepare the crop for market, so as to render it an object of greater profit than our present agricultural staples?

The first question is partially answered by the knowledge we possess, that Cotton has heretofore been raised in the lower portion of the peninsula between the Delaware and Chesapeake Bays, so as to form an important item in home industry.

A lady living in Camden, Delaware, some time since picked some stray seeds from cotton which she had bought, and planted them in the garden; these grew and perfected their pods, from which she picked the cotton, spun it into thread, and knit several pairs of stockings.

A colored family, of the name of Miller, came last year from Sussex county, to live in Camden, Delaware, bringing with them the seed of cotton which they had always cultivated and spun and wove for clothing. The cotton in this new situation perfected itself well, and I have succeeded in getting about a quart of the seed, which, with as much more as I can obtain from other places,—enough, I hope, to put on several acres,—I shall plant near the same place the present season. This family made it a rule to plant their cotton on the 12th day of May.

Friends of mine in Kent county, Delaware, have obtained cotton seed from the neighboring county of Caroline, Maryland, where it was raised last year, and has been cultivated every year in a small way, for family uses, since its first introduction on the peninsula.

The instances here cited might appear trifling if they did not afford positive assurances of the ability to mature Cotton in the localities named.

2d. In answer to the second question, relating to the skill required for managing the crop in all its stages—it may be observed that for the preparation of the ground, and all subsequent operations in culture, no more skill is required than what is usually demanded in the raising of corn. The picking, drying and ginning, are simple processes, performed by common hands of all ages and sexes.

COMPARATIVE PROFITS OF COTTON AND CORN.

In the mixed husbandry of the South, a hand is allotted the same number of acres to till in corn as in cotton; showing that so far as labor is concerned, the costs of the two crops are about the same. In the picking, ginning and packing of cotton, more expense may be incurred than in the gathering and shelling of corn.

Supposing an acre to produce 125 pounds of clean cotton-wool, this, at 20 cts. per pound, (far below the present price,) would bring \$25.00. The value of the seed would perhaps be equal, if not superior, to that of an ordinary oat crop; it contains over nine per cent. of its weight of a valuable oil, which in many countries, and even in our own, is used for eating, burning and other purposes. It has been bottled up in this country and sold as table oil, not, of course, under its proper name. As the seed constitutes about three-quarters of the weight of the crop, and when abundant, sells by the bushel for about the price of oats, its value will perhaps more than cover most, if not all the costs of preparation of the crop for market.

Land which would yield no more than 125 pounds of clean cotton, or the average of the old cotton fields in the South, would hardly produce 20 bushels of corn per acre, which at fifty cents, would bring \$10.00; so that 10 acres in cotton would yield \$250, whilst 10 acres in corn would bring only \$100; a difference in favor of cotton of \$15.00 per acre, and \$150 in 10 acres, or \$1,500 in every hundred acres, over its produce in corn. Land which would yield more corn, would of course give more cotton.

As the price of Cotton has advanced to nearly double that upon which this estimate is based, the profits of Cotton must be correspondingly increased. Should the threats of desperate Southern planters, to burn their Cotton crops, and plant only corn, be carried out, there is no telling how much higher the price of Cotton may be advanced, and that of corn reduced.

How long Southern competition may be cut off, remains to be ascertained from the results of momentous events now transpiring. Until it is resumed, and probably for some years to come, Cotton may be a most profitable crop in all situations where the soil and climate are favorable to its growth.*

CULTURE AND VARIETIES.

For the benefit of persons unacquainted with the processes pursued in raising Cotton, I will state what these are, in the shortest and plainest manner. It is not to be expected that any very extensive trials will be made the present season. But surely it becomes those interested in promoting the agricultural interests of the Middle States, to engage in experiments, on however small a scale, if only an acre, half acre, quarter, or even the eighth of

* Tobacco, another great Southern staple crop, is raised in large quantities in the Northern and Eastern States. In New York there are fields of twenty to twenty-five acres, and in Connecticut Tobacco constitutes a large item of its agricultural products. Why may not Cotton and Tobacco too, be added to the agricultural resources of Delaware?

an acre each, in different situations. For any such I think the following details will suffice to direct them through all stages of the crop. They are chiefly obtained from the "Farmer's and Planter's Encyclopædia," which work I published several years ago.* Some additions have been since made after consulting those brought up among the cotton fields of the Southern States.

It may be well to mention that the only kind of Cotton to which I refer as an object for cultivation in the Middle States, is what is known as the Green Seed, Upland, or Short Staple. The Sea Island, or Black Seed variety, raised on the coasts of South Carolina and Georgia, is not adapted to general culture. Trials made among us with Sea Island seed, would doubtless be attended with discouraging results.

As a general rule, the maturity of plants is effected in much less time in northern than in southern situations. The planting is made in the Southern States, from the first to the last day of April, so as to place it beyond danger from frost. There are varieties of Upland Cotton, such as the Mexican or Petit Gulf—so much cultivated in the South-western States—which attain to maturity a fortnight in advance of other kinds, and such would doubtless answer best for those who engage in the culture in more northern situations.

PREPARATION OF THE GROUND.

The ground is to be deeply and thoroughly broken with the plough, and it is important to have this done very early. The soil should be made as loose as possible and just before planting time, thrown into ridges or beds. As soon as there is no danger from frost, say from the first to the middle of May, the planting may begin. But this should be a little later than is safe for corn, which when nipped by frost generally shoots up again. Cotton when once nipped by frost never survives.

* See *Gossypium*, a long article, embracing much more on the subject of Cotton, its culture, statistics, &c., than can be compressed into this intentionally small pamphlet.

PLANTING.

This may be made in hills like corn, but the general practice is to put it in drills. The direction of the rows should be such as to give the plants the fullest benefits of the sun ; the distance of the rows apart is to be regulated by the quality of the soil, the richer the farther apart. On land capable of producing fifteen or twenty bushels of corn to the acre, the rows may be four feet apart ; thirty to fifty bushels, five to six feet apart. The rows about four feet, and the plants left ten inches apart, will afford good average distances.

The rows are to be signed out as straightly as possible, so as to admit the plough to run closely to the plants when these come to be cultivated. A very small, narrow and light plow is used to run out the rows ; the furrows to be very shallow and along the top of the ridge, the soil having previously been made very loose and fine.

The seed are to be dropped with great regularity along the shallow trenches, about as far apart as bunch beans. Half a bushel has sometimes been made to plant an acre, although it is common in the South to strew the seed much thicker in the rows, several bushels to the acre being used ; what is not allowed to grow, operates as manure upon the crop. The seed must be covered with hoes, very lightly, *not over an inch deep*. It is recommended to soak the seed previous to planting, in water or salt and water, in which it may be left over night, and dried by rolling in ashes or loose mould.

MANAGEMENT OF THE CROP.

After the Cotton comes up and begins to show its fourth leaf, the thinning commences, which is generally done very cautiously, with hoes. Two plants may be left together at this first thinning. When the sixth leaf is out and there is no danger from frost, the last thinning may be made so as to leave the plants about ten inches apart, and still farther where the ground is rich.

When the earth is very damp, no cultivation should be attempted, as there is danger from rust when worked during

wet weather. When only moderately damp, the earth may be thrown from the Cotton very gently by the plow, and after drying turned back again. The hoes follow the plow and remove or cover up all remaining grass. This work of plowing and hoeing to destroy the grass and stir the earth, is continued until the Cotton grows so large as to become injured by the passage of the plow, after which any further culture must be done with the hoe. As the Cotton increases in height, the rows must be gradually ridged up so as to keep the plants from falling.

The first plowing may be deeper than the latter. As a general rule, the earth must be kept clear from grass and well cultivated. When Cotton attains nearly its full height, say about the middle of August, the top bud should be clipped off with the finger-nail or small knife; this is done to increase the side branches and number of bowls. Some planters consider topping unnecessary.

It may be observed that the cotton plant differs from corn in this essential point; it has a tap root through which it derives its main sustenance; whereas, corn spreads its roots near the surface, and is hence liable to be much injured by late deep working. Four plowings and as many hoeings, will generally suffice for Cotton, till it is laid by, indicated by the budding of the lower branches.

PICKING.

The bowls of cotton mature and open, in the Southern States, about the last of August or first part of September, when picking begins, and continues until put an end to by sharp frosts, which sometimes hold off for two or three months.

The picking is performed by male and female hands, provided with osnaburg bags hung over the neck and shoulders, into which the cotton is put as fast as picked; these when full, are emptied into large osnaburg sheets, placed at convenient spots; the sheets are carried home in the afternoon. When there is a "good opening," one hand can pick about one hundred pounds per day of seed cotton.

The pickers are cautioned to guard as much as possible against gathering a small leaf which, when it gets dry, often mixes with the cotton and never can be got out, thus injuring the sale.

DRYING.

The freshly picked Cotton is first spread to dry, on scaffolds about four feet wide, so as to admit of easy turning it over whilst drying. A Cotton house should be at hand in which to place the cotton in case of rain. After being perfectly dried, it is ready to be ginned and prepared for market. Care in drying is chiefly confined to the early picking, before the seed becomes dry; after these are fully matured, very little drying will be required. Dews or rain-water must always be removed by exposure on the scaffold before the Cotton is bulked in the house.

GINNING.

Those who cultivate patches, may readily have the seed separated in the primitive way, by the hand. For such as extend the culture to acres, there are cheap hand gins, and machines worked by water or steam power.

With the capabilities unquestionably possessed for raising Cotton, in many portions of the Middle States, our farmers would be blind to their own interests and regardless of their independence, if they did not take advantage of the present crisis, and make vigorous efforts to obtain a share of the most valuable and important crop in our country.


The culture of Cotton must doubtless prove most successful in Delaware, on the light and warm sandy loams prevailing in Sussex and some portions of Kent County, especially in Murderkill and Mispillion Hundreds, where the light and open soil prevents the long detention of excess of moisture about the roots, and at the same time readily admits the warmth from

the sun, and gases from the atmosphere. On such soils the plant would doubtless attain its maturity earlier than in the stiff clay lands in the necks and other portions of the State. Early maturity is a most important consideration, as it prolongs the picking season.

From the agricultural improvements made during the last twenty years—which have been greater than for many centuries before our time—we can now engage in the culture of Cotton with assistants never had before, and doubtless be able to compete more successfully with those who possess superior advantages from climate. One of these great agricultural improvements, consists in the means afforded of hastening the maturity of crops, through the application of proper artificial fertilizers. Having for several years used one of these upon other farm crops, and succeeded in bringing Indian Corn to maturity two weeks at least earlier, than where none were employed, I believe that Cotton may also be brought forward by similar means, and quite as readily, so as to add considerable time to our otherwise short picking season.

COTTON SEED.

A large supply of Upland Cotton Seed, (1,400 bushels,) is announced as having been recently obtained from North Carolina, for distribution through the Agricultural Beaureau of the Patent Office. It is to be hoped that this will not be fruitlessly exhausted, by being sent into places not offering good chances for the developement of the culture, but to those which are known to present the best prospects of success. If this plan is followed, a large proportion should be distributed to the farmers on the peninsula between the Delaware and Chesapeake Bays.



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WITH DIRECTIONS

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BY

G. EMERSON, M.D.,

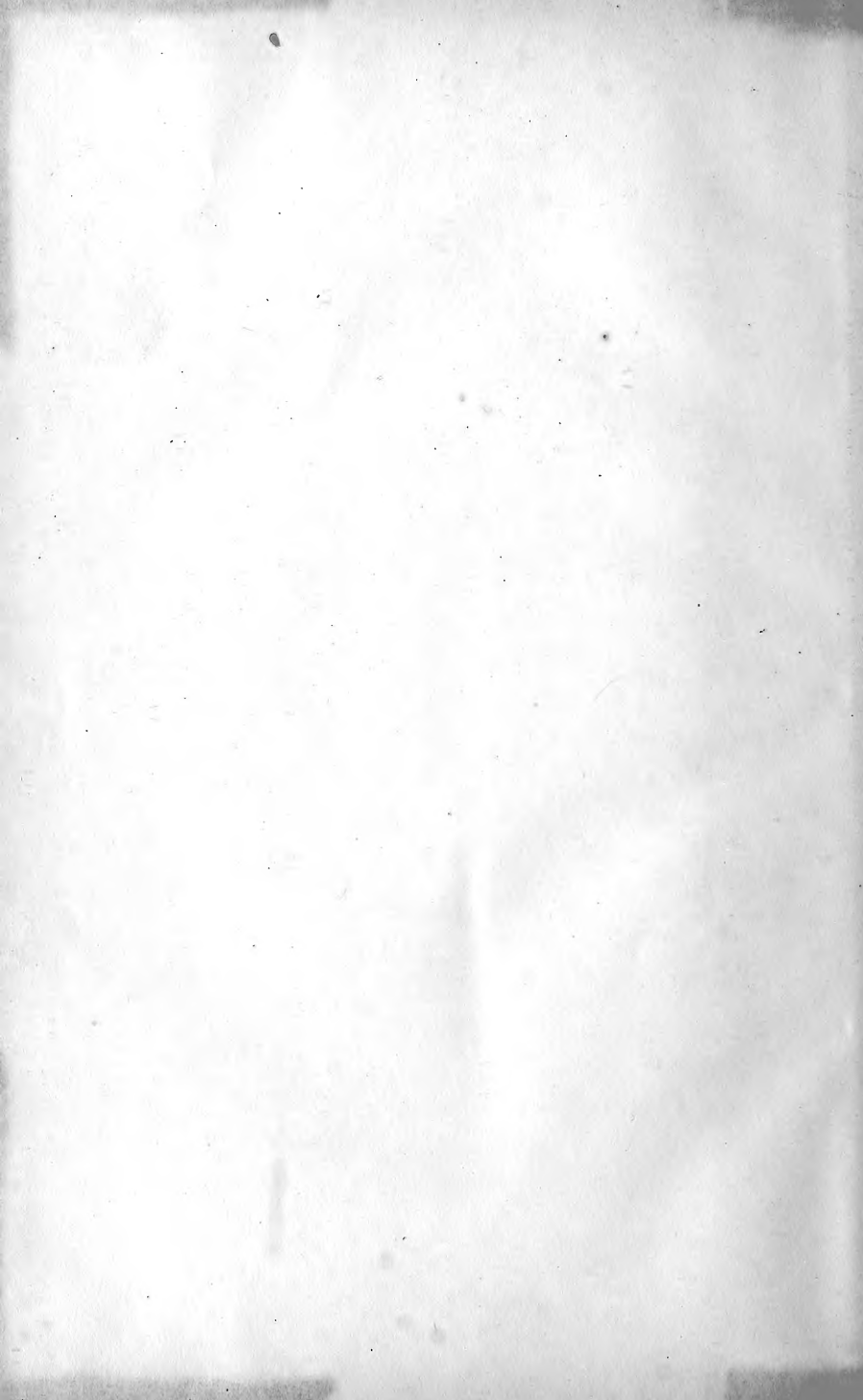
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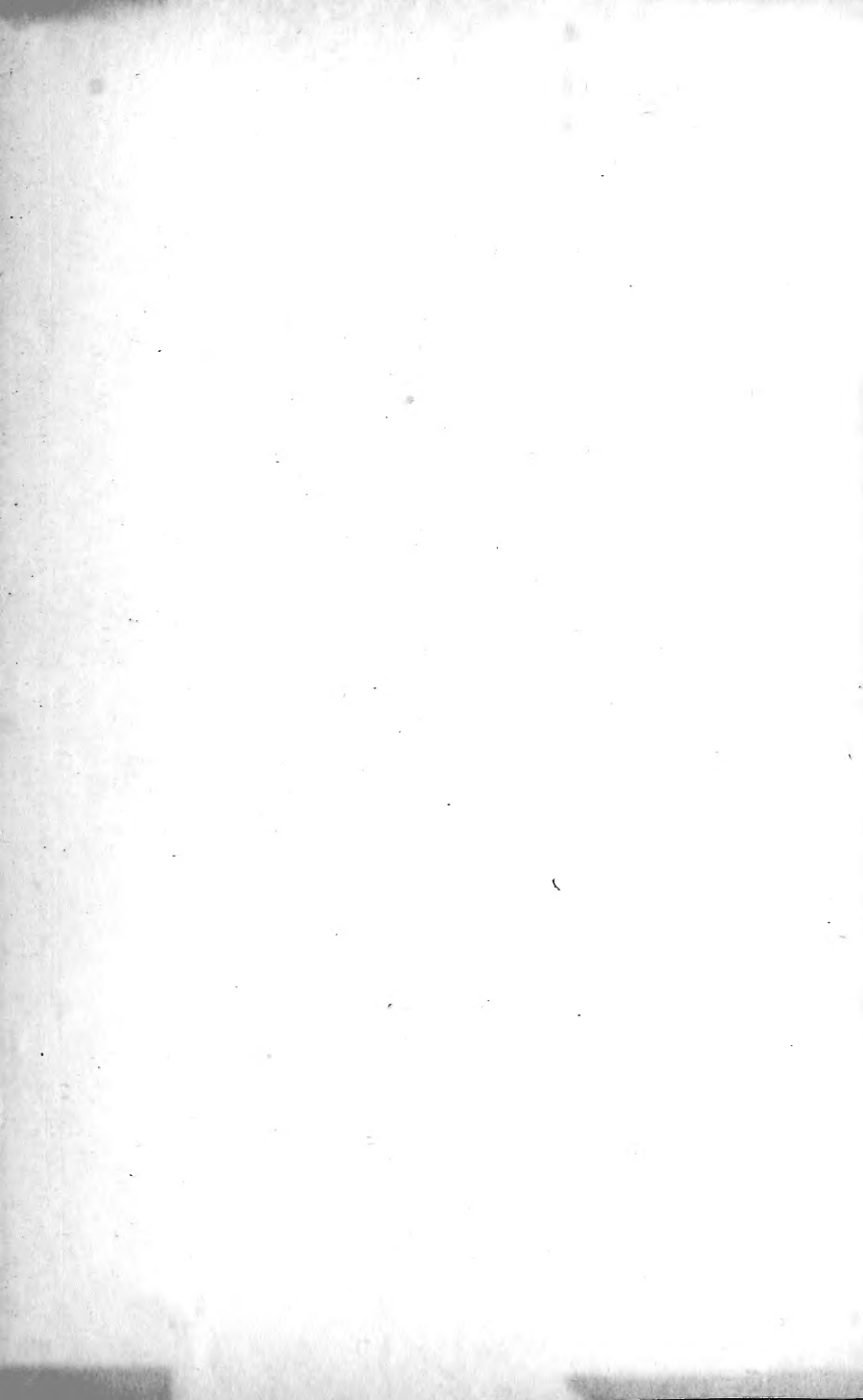
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